

AMENDMENTS TO THE DRAWINGS

Please amend the drawings as follows:

In Figure 1, add the reference numeral 100 and its lead line as shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 3A, add the reference numeral 100 and its lead line and change reference numeral "132" to --134-- as shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 8E, change reference numerals "104a" and "104b" to --112a-- and --112b--, respectively, and reference numerals "140a" and "140b" to --112a-- and --112b--, respectively, as shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 9A, change reference numerals "104a" and "104b" to --112a-- and --112b--, respectively, and add the lines shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 9B, add the lines shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 9C, change reference numerals "104a" and "104b" to --112a-- and --112b--, respectively, and add the lines shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 13A, change reference numerals "104a" and "104b" to --112a-- and --112b--, respectively, and add the lines shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

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In Figures 13B, 13C, and 13D, add the lines shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figures 14A and 14B, change reference numeral "104a" to --112a-- as shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

In Figure 17, change reference numerals "200" to -200'-- as shown in red on the enclosed Annotated Marked-up Drawing copy thereof.

REMARKS

This amendment is offered in reply to the office action of July 24, 2006. A petition and fee for a three (3) month time extension are enclosed, making this response due on January 24, 2007.

Applicants appreciate and acknowledge allowance of claims 8-10, 13, and 56-57 as set forth in paragraph 16 of page 13 of the office action. Claim 8 has been incorporated into claim 1 and has been cancelled.

Applicants have amended claims 3 and 4 to place them in better form.

In paragraph 2 of the office action, claims 19-55 and 58 are withdrawn. Applicants affirm their election to prosecute the Group I claims 1-18, 56, and 57 and have cancelled claims 19-55 and 58 without prejudice. Applicants reserve the right to prosecute claims 19-55 and 58 at a later date by way of divisional application or other means.

In paragraph 3 of the office action, the drawings are objected to under 37 CFR 1.84(p)(5). Applicants have amended certain drawings in a manner believed to overcome the objections. Applicants enclose herewith Replacement Drawing sheets in an Appendix Of Replacement Drawing Sheets and Annotated Marked-up Drawings containing the amended drawings in an Appendix Of Annotated Marked-up Drawings.

Approval of the Replacement Sheets and reconsideration of this objection to the drawings is requested.

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In paragraph 4 of the office action, the drawings are objected to under 37 CFR 1.84(p)(4).

Applicants have amended certain drawings in a manner believed to overcome the objections. Applicants note that the amendments to Figures 9A, 9B, 9C and Figures 13A, 13B, 13C, 13D were approved by the examiner after reviewing proposed drawing amendments (submitted by Applicants via facsimile communication on January 9, 2007) in a telephone discussion with the undersigned on January 16, 2007.

Approval of the enclosed Replacement Sheets and reconsideration of this objection to the drawings is requested.

In paragraph 5 of the office action, the drawings are further objected to for the reasons set forth.

In addition to other changes set forth above, Applicants have amended the drawings to change reference numerals "104a" and "104b" to --112a-- and --112b--, respectively, in Figures 8E, 9A, 9C, 13A, 14A, and 14B, and have amended the specification where appropriate to effect this same change so to conform the written specification and the drawings. Applicants enclose herewith Replacement Sheets containing the amended drawings.

Applicants note that the amendments to Figures 9A, 9B, 9C and Figures 13A, 13B, 13C, 13D were approved by the examiner after reviewing proposed drawing amendments (submitted by Applicants via facsimile communication on January 9, 2007) in a telephone discussion with the undersigned on January 16, 2007.

Approval of the Replacement Sheets and reconsideration of this objection to the drawings is requested.

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In paragraph 6 of the office action, the drawings are objected to under 37 CFR 1.84(p)(5). Applicants have amended Figure 8E in a manner described above believed to overcome the objections.

Approval of the enclosed Replacement Sheets and reconsideration of this objection to the drawings is requested.

In paragraph 7 of the office action, the drawings are objected to under 37 CFR 1.84(p)(4). Applicants have amended Figure 17 and the specification in a manner described above believed to overcome the objection.

Approval of the enclosed Replacement Sheets and reconsideration of this objection to the drawings is requested.

Pursuant to paragraph 8 of the office action, Applicants enclose herewith Replacement Drawing sheets in an Appendix Of Replacement Drawing Sheets and Annotated Marked-up Drawings containing the amended drawings in an Appendix Of Annotated Marked-up Drawings.

Approval of the Replacement Sheets and reconsideration of this objection to the drawings is requested.

In paragraphs 9-10 of the office action, the specification is objected to as a result of certain identified informalities. Applicants have amended the specification as indicated above in a manner believed to overcome the objections.

Reconsideration of the objections to the specification is requested.

In paragraph 11 of the office action, claims 1-18 and 57 are objected to as a result of certain identified informalities. Applicants have amended the claims in a manner believed to overcome the objections.

Reconsideration of the objections to claims 1-18 and 57 is requested.

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In paragraph 13 of the office action, claims 1-7, 11, and 15-18 are rejected under 35 USC 102(e) as anticipated by US 2006/0057031 (publication).

Applicants believe amended claim 1 patentably distinguishes over the cited '031 publication. In particular, the features of claim 8 have been incorporated into the claim 1, rendering claim 1 allowable over the '031 publication.

Claims 2-18 depending from claim 1 are allowable also. In particular, claim 3 recites a sealing layer to seal a gap at outermost edges of the thin films. This feature is not disclosed in the '031 publication, which discloses a protective coating 461 but not a sealing layer to seal a gap at outermost edges of thin films. A review of Figures 6A-6C and 8A-8F of the '031 publication reveals that it does not disclose a gap between thin films.

Claim 4 recites that an outermost edge of one of the thin films includes an angled region extending from a respective planar film region and wherein the sealing layer fills a gap between the thin films at the angled region. A review of Figures 6A-6C and 8A-8F of the '031 publication reveals that it does not disclose an angled region at an outermost edge of one of the thin films.

Claim 15 recites that the microchannel comprises first and second side-by-side channel regions separated by a wall wherein the channel regions terminate in a common arcuate channel region extending partially about the dispensing tip. Contrary to the examiner's comments, the '031 publication does not disclose an arcuate channel extending partially about a dispensing tip. The channel of the publication simply ends or terminates at the end of the cantilever.

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Reconsideration of the Section 102 rejection of claims 1-7, 11, and 15-18 is requested.

In paragraph 15 of the office action, claims 12 and 14 are rejected under 35 USC 103(a) as obvious over US 2006/0057031 in view of In re Yount.

These claims are believed to be allowable for the same reason as set forth above claims 1-7, 11, and 15-18.

Reconsideration of the Section 103 rejection of claims 12 and 14 is requested.

Applicants have added new claims 59, 60, and 61 directed to features that are not disclosed or suggested by or in the '031 publication.

The Commissioner is authorized to charge any fee for new claims 59-61 to my deposit account No. 20-1124.

Applicants believe the pending claims are in condition for allowance, and action to that end is requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Edward J. Timmer', with a stylized flourish at the end.

Edward J. Timmer
Reg. No. 27 402

Enclosure: Appendix Of Replacement Drawing Sheets
Appendix Of Annotated Marked-up Drawings, Post Card

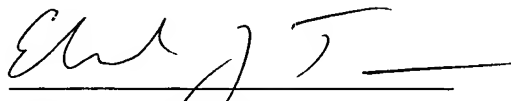
Telephone: 269-629-9136

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service under 37 CFR 1.8 as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 19, 2007.


Edward J. Timmer

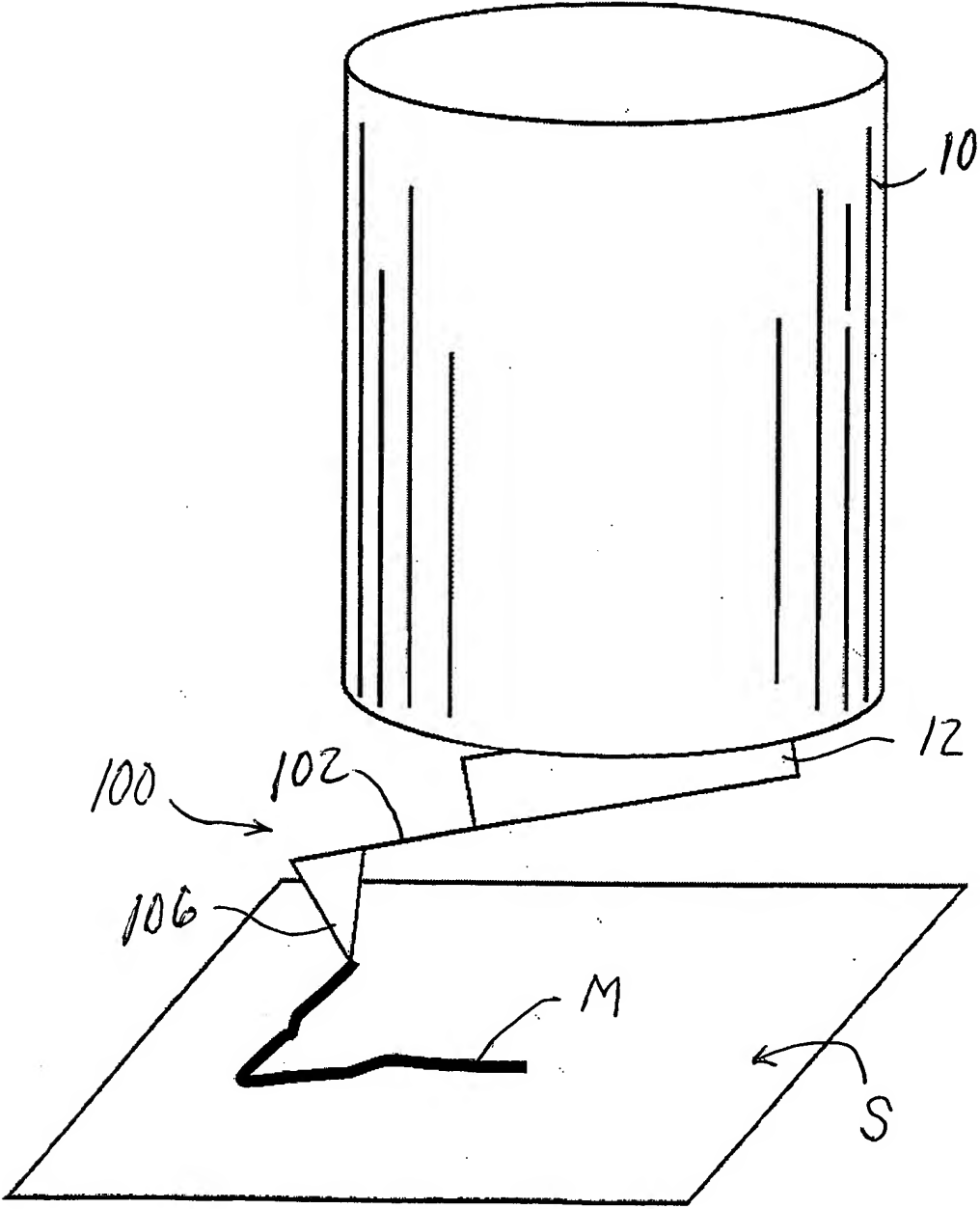


Figure 1

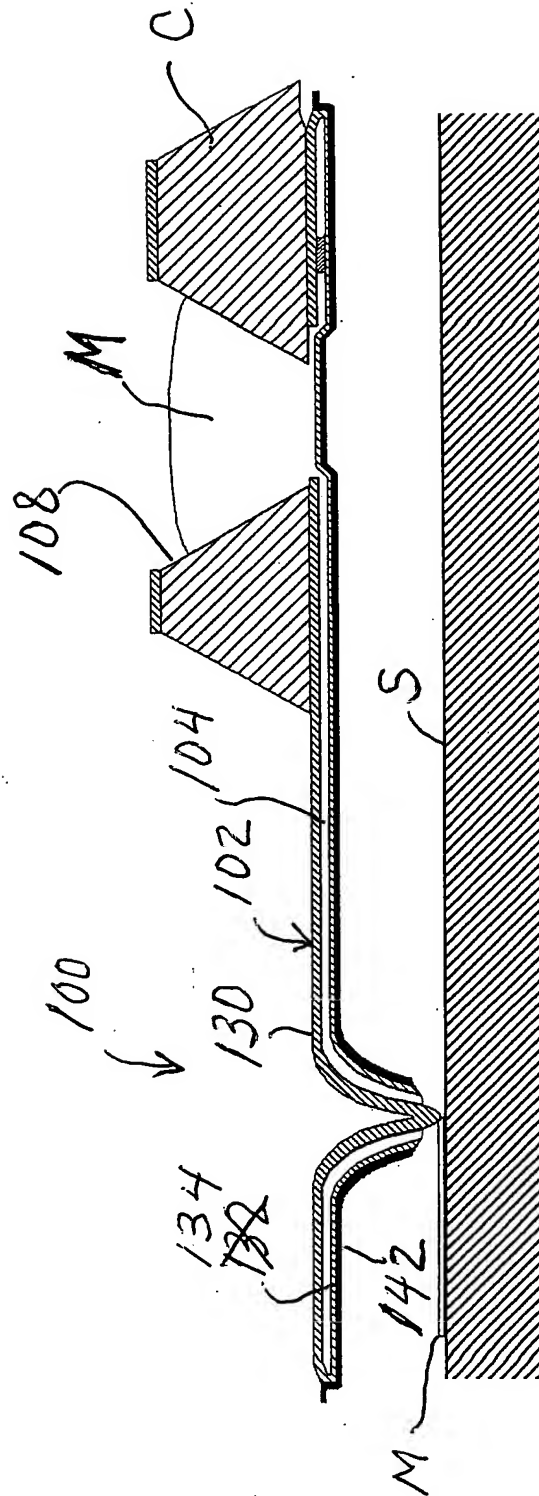
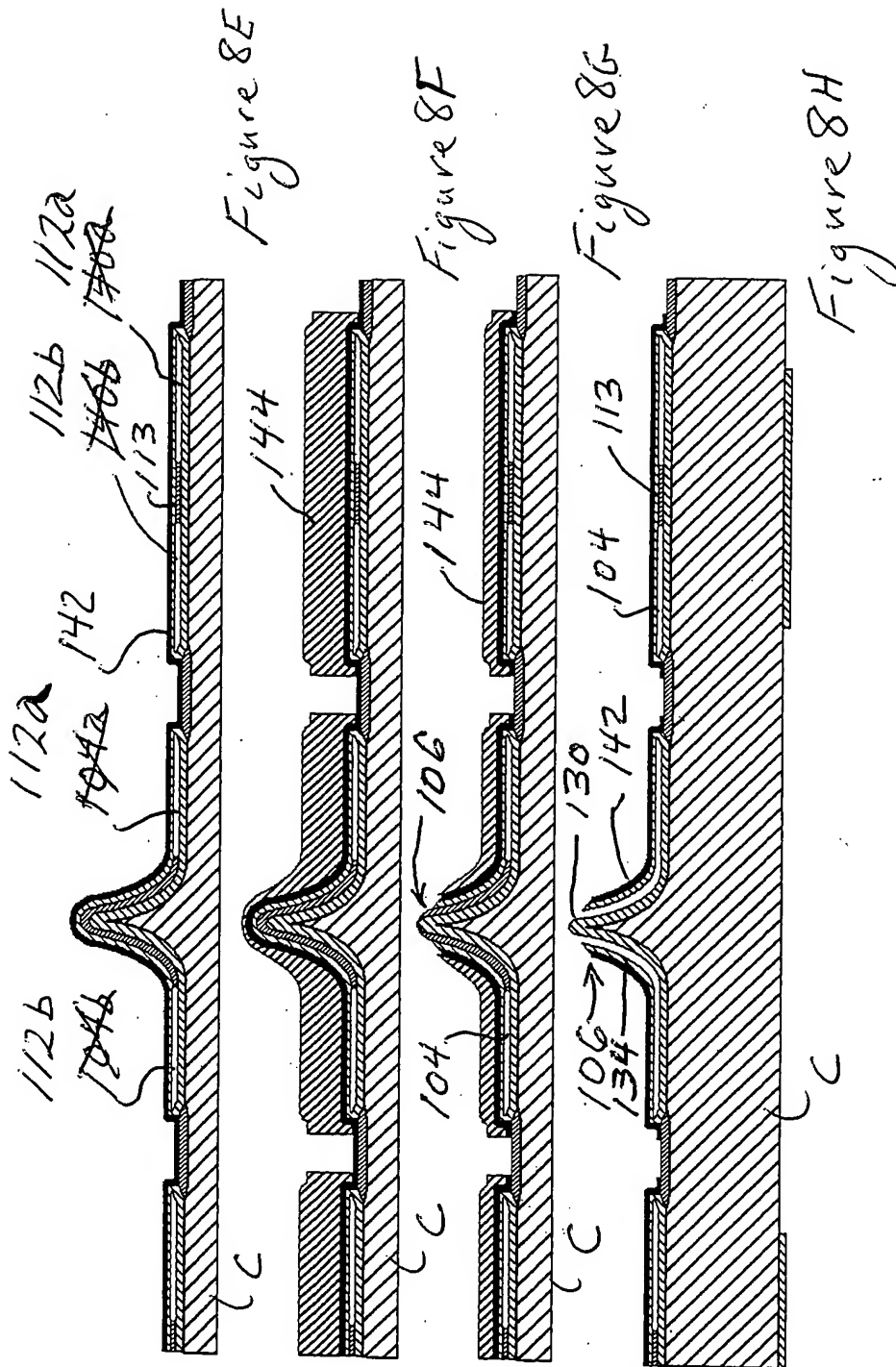


Figure 3A



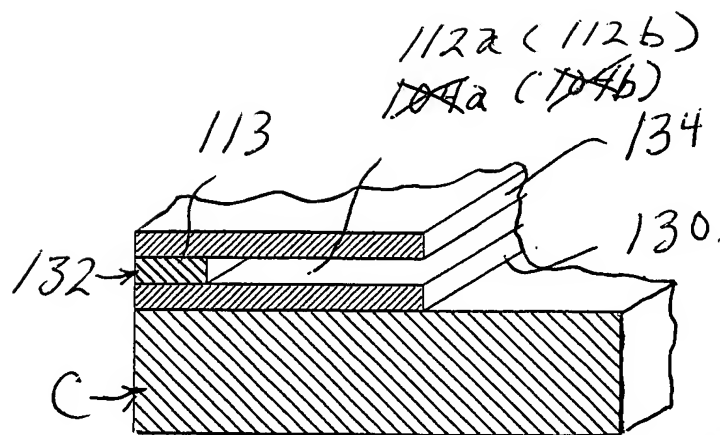


Figure 9A

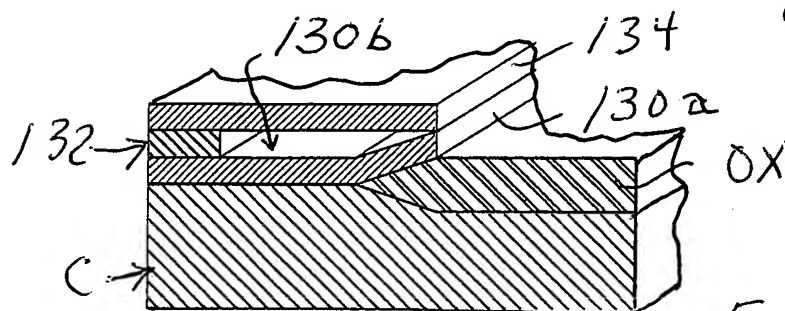


Figure 9B

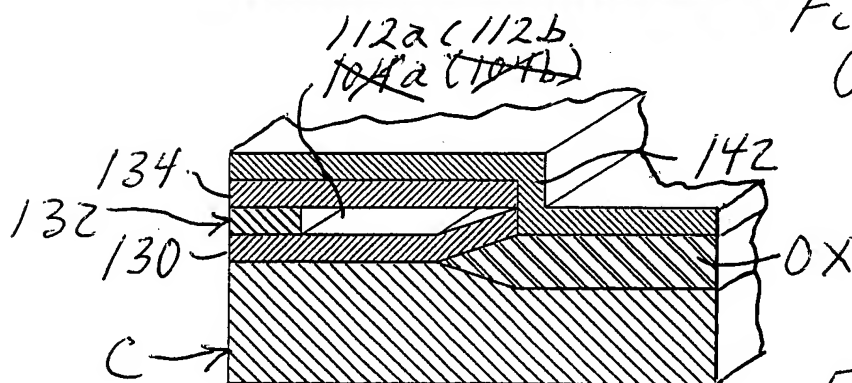


Figure 9C

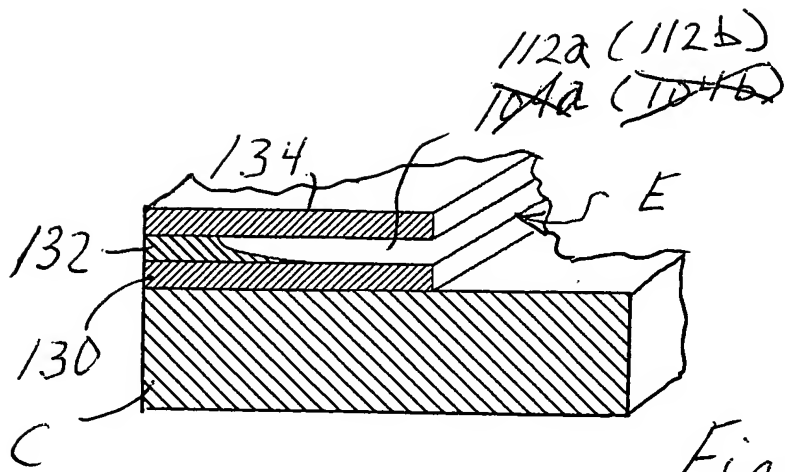


Figure 13A

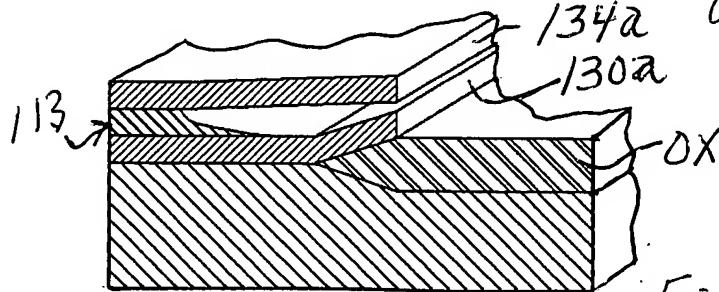


Figure 13B

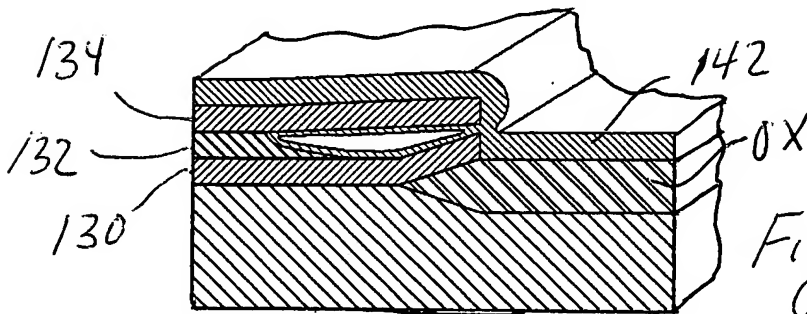


Figure 13C

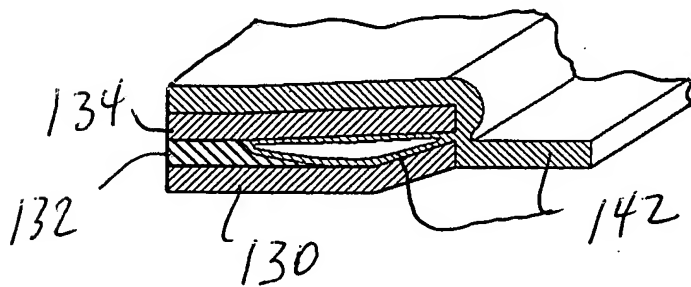


Figure 13D

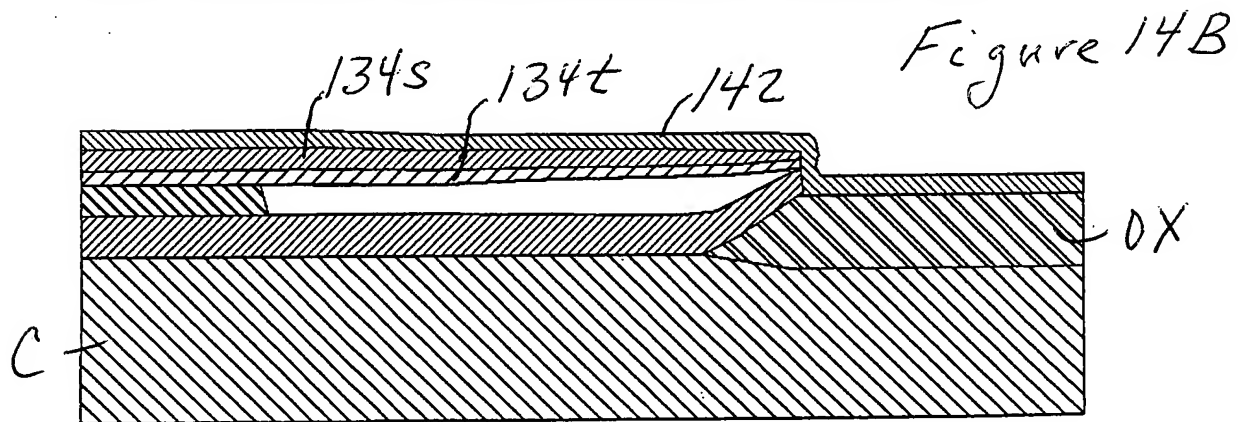
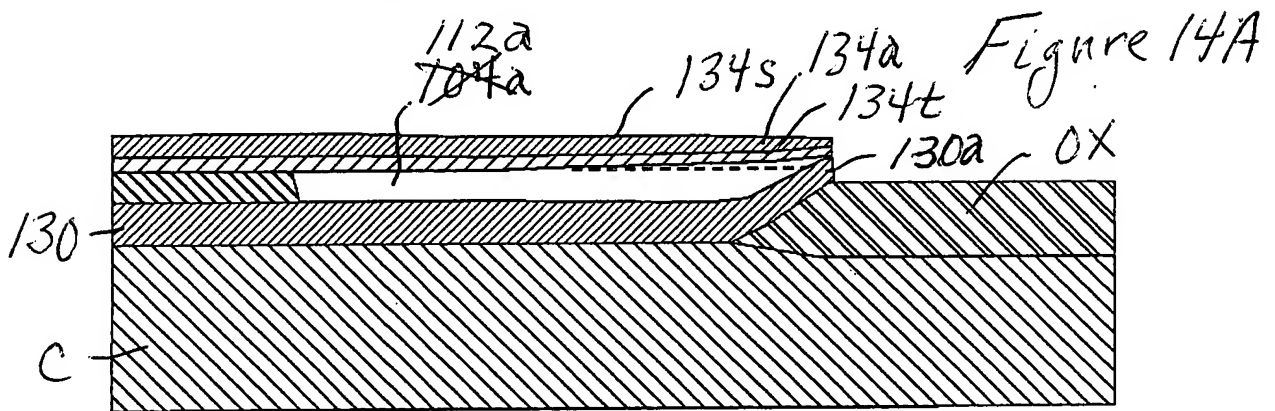
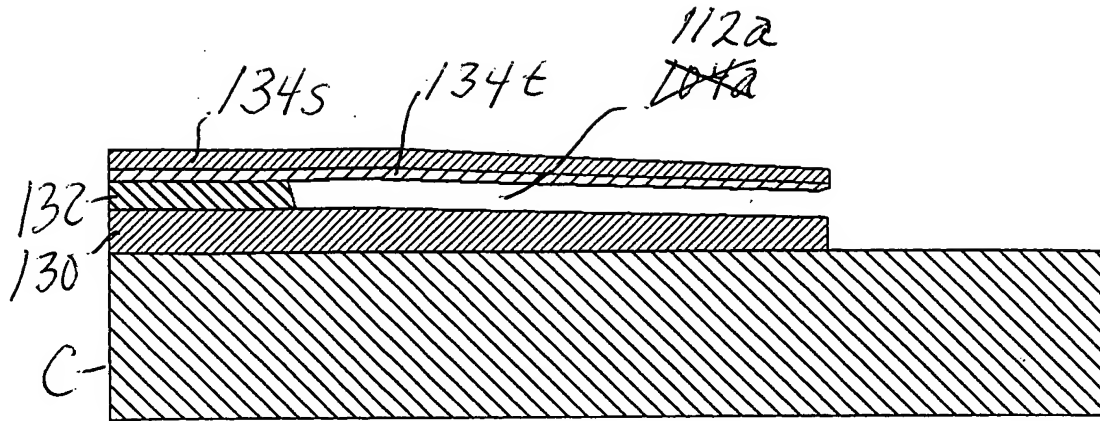


Figure 14C

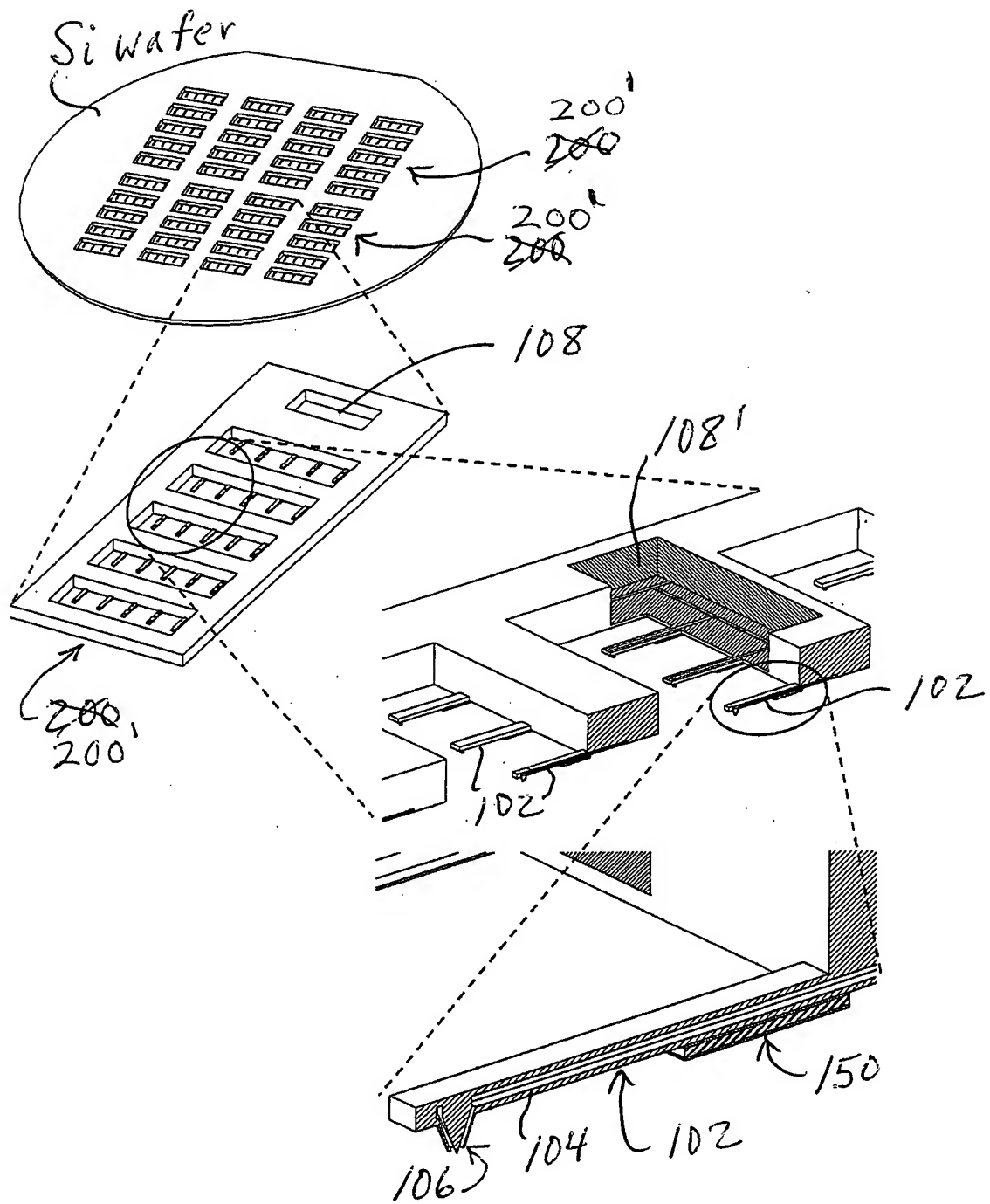


Figure 17